CLAIMS

What is claimed is:

1. A method for preparing manganese-based nitride expressed by the following formula (1) having a cubic antiperovskite structure, wherein a mixture of Mn_2N and Cu is placed into a quartz tube, evacuated, sealed, and sintered at 800-900℃ for 40-60 hr.

$CuNMn_3$ (1)

2. The method for preparing manganese-based nitride according to claim 1, wherein amount of Mn_2N is used in the molar ratio of 1.45-1.55 per mole of copper.

3. The method for preparing manganese-based nitride according to claim 1, wherein the temperature is raised with a rate of 40-50℃/h in the sintering process.

4. The method for preparing manganese-based nitride according to claim 1, wherein said mixture is wrapped with titanium foil before placed into quartz tube.

5. A manganese-based nitride of the formula (1) prepared according to one of claims 1 to 4 has temperature coefficient of resistivity of 40-50 ppm/K and a cubic antiperovskite structure.

$CuNMn_3$ (1)